W. PREISS.

Sewing Machine.

No. 44,889. Patented Nov. 1, 1864.

Fig. 1

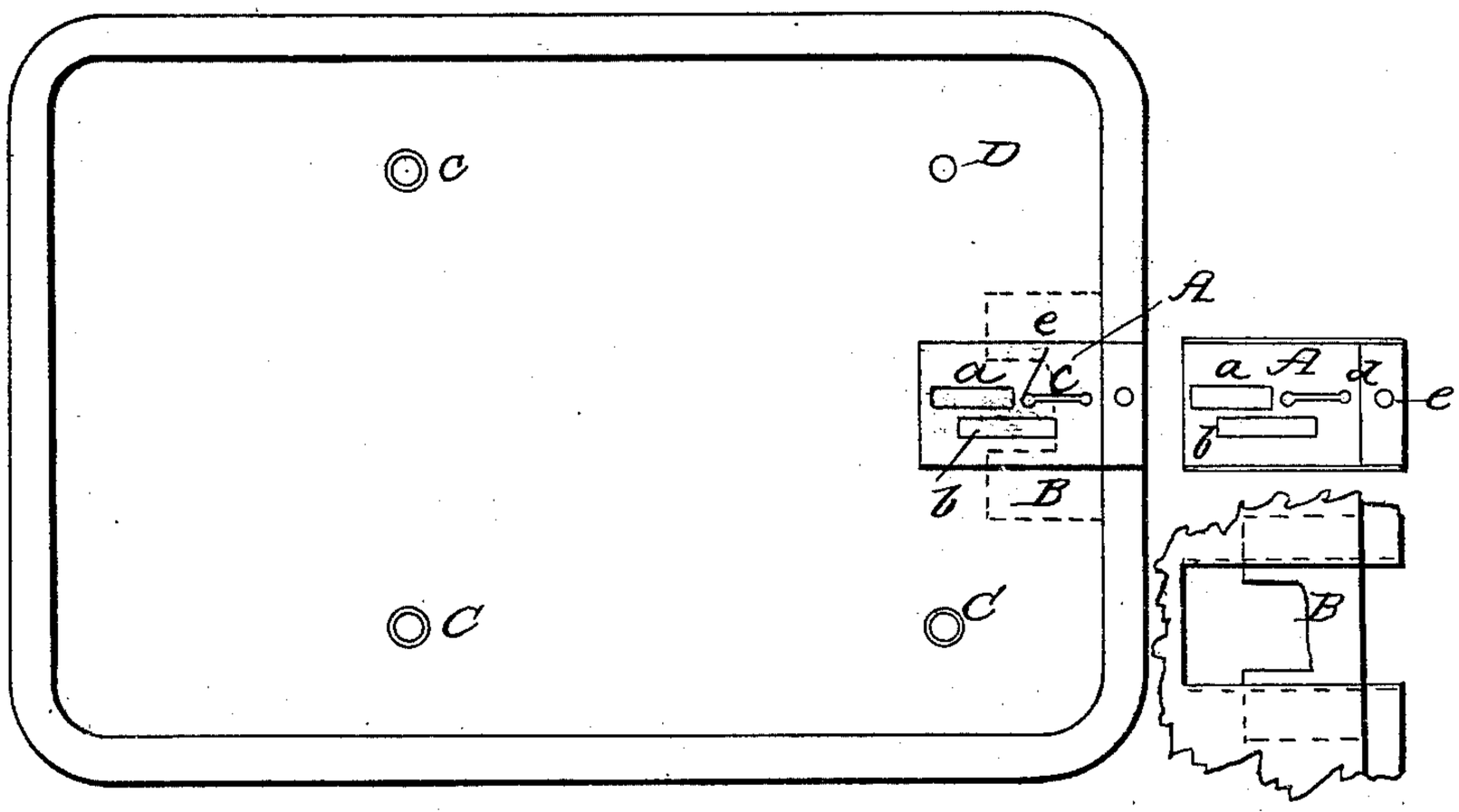
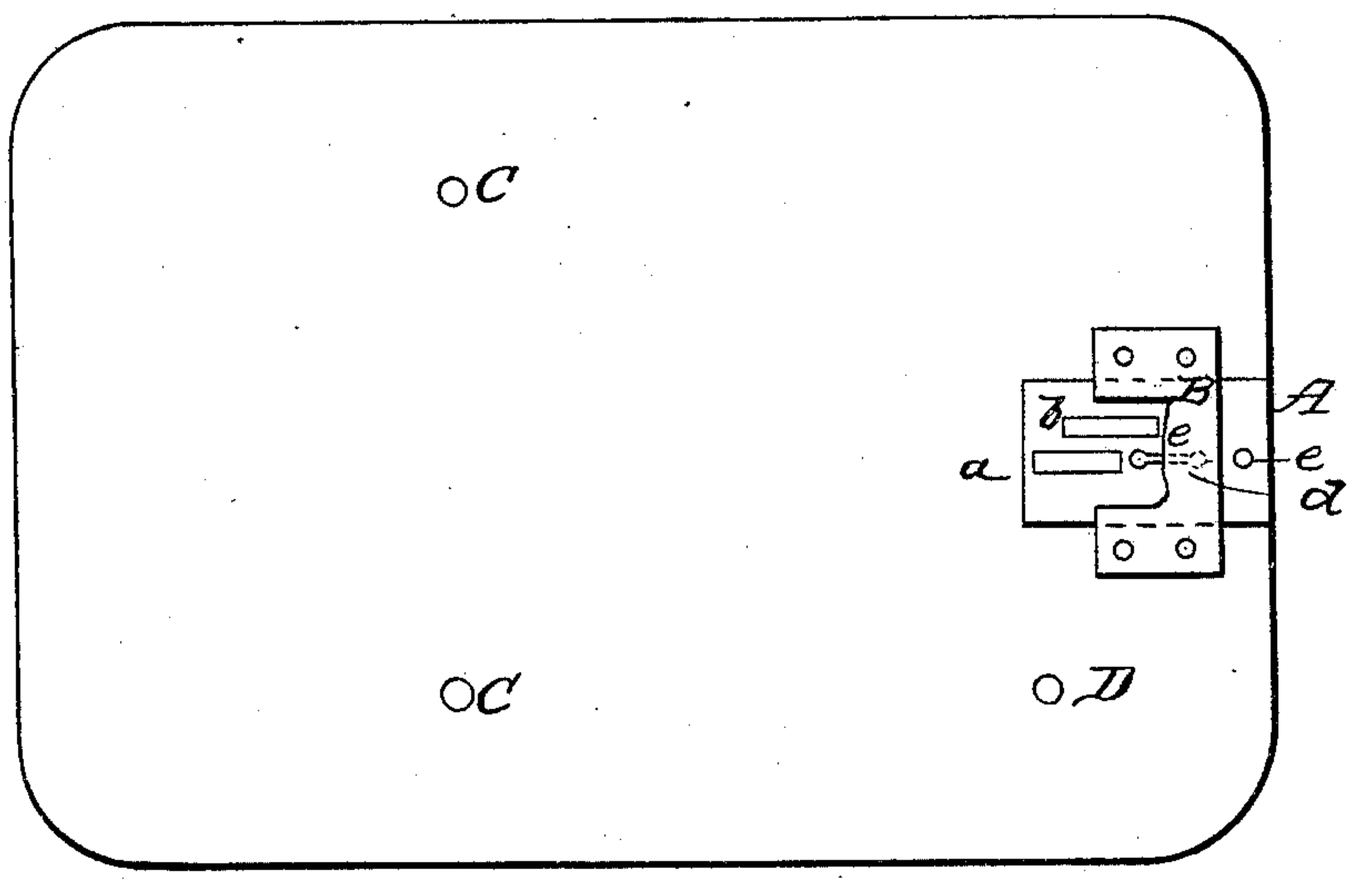


Fig. 2



WITNESSES
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UNITED STATES PATENT OFFICE.

WILLIAM PREISS, OF NEW YORK, N. Y.

IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. 44,889, dated November 1, 1864.

To all whom it may concern:

Be it known that I, WILLIAM PREISS, of the city, county, and State of New York, have invented a new and useful Improvement in Sewing-Machine Plates; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, figures, and letters of reference thereon, making part of this specification.

Of the said drawings, Figure 1 shows a top view of my improved plate. Fig. 2 is an under side view of the same. Figs. 3 and 4 show parts in detail.

Similar letters of reference indicate corresponding parts in all the drawings.

In the ordinary steel plates used in the Wheeler & Wilson and other similar sewing-machines the constant puncturing of the material by the needle soon wears the plate down, so that the material will punch or drive down and catch and impede the progress of the machine. It is also necessary in the above class of machines to have two or more plates with different-sized holes for the needle to pass through for coarse and fine work, as the hole should be but a little larger than the needle to offer firm resistance of the material at the point of puncture.

My invention consists in so combining and arranging a plate provided with feed-slots and a needle hole with the removable plate of a sewing-machine that the part subject to wear from the puncturing of the needle may be hardened and readily detached for a new plate, or one adapted for fine or coarse work, as may be desired.

To enable others skilled in the art to make and use my invention, I will describe the construction and operation thereof.

I take, for instance, a Wheeler & Wilson machine plate and cut or press out with a die a portion, as shown in Fig. 4, and bevel one or both edges on each side. I then construct the die or needle-plate A with a groove or dovetail edge, so that it will fit nicely into the recess cut in the main plate. I then cut the slots *a* and *b* for the feed-points to project through the plate and drill the needle-hole *c* and hole *d*, which form one end of the slit, for the under thread as the material is carried forward for the stitches. I also drill another hole, *e*, for the purpose of readily removing the plate A by means of a wire hook. Upon the under side of the plate I secure a thin metal plate, B, by means of rivets or solder, as shown in Fig. 2, which serves to hold and support the plate or needle-die A upon the under side. On this metal piece B there is a smooth rounded edge, *f*, over and along which the thread is drawn in sewing long stitches.

One important advantage derived from my invention is the plate A can be properly hardened, which cannot be done with a whole plate, as they warp so badly. The main portion of the plate ordinarily used on a sewing-machine will last a life-time, as it is not subject to any wear, and the needle die-plate A of different sizes can be readily changed and the machine adapted to coarse or fine work or replaced, when worn out, at a fraction of the cost of the plate now used.

I am aware that sliding plates provided with feed-slots and a needle-hole have been used in sewing-machines not having removable plates, and I therefore lay no claim to such.

I claim—

The plate A, in combination with the bar B and removable plate of a sewing-machine, substantially as described, and for the purpose set forth.

W. PREISS.

Witnesses:
C. A. DURGIN,
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